Statements/Responses Issued by HQ and Regions to media on W. Va and N.C. coal ash spills – 2/6/14

West Virginia Spill

Sent by HQ:

- To Nelli Black of CNN

State and Federal (ATSDR/CDC) health officials agreed on a protective health level for MCHM and PPH. EPA's drinking water experts worked closely with other Federal and State agencies in West Virginia as they developed their plan for getting the drinking water system back on-line. Sampling results show that the flushing approach has been effective. A re-evaluation of earlier samples for PPH has indicated it was not detectable or present at levels far below the protective level. EPA has been working with a group of scientists and lab experts who have increased confidence in laboratory analysis of MCHM and PPH in water. Several labs were successful in obtaining lower detection limits for both chemicals.

Note: Also refereed reporter to WV and CDC for her interview request on water quality.

North Carolina Spill

Sent by HQ:

- To Michael Biesecker of AP

On February 3, 2014 The N.C. Department of Environment and Natural Resources (NC DENR) contacted EPA requesting technical assistance for the coal ash release that occurred at the Duke Energy Dan River Steam Station coal ash pond in Rockingham County, NC.

There are still intermediate releases from the storm drain. Removing water and pumping around the broken line in the ash pond is in place and working effectively, allowing the damaged storm sewer line to be excavated.

EPA Regions 3 and 4 deployed On-Scene Coordinators (OSCs) and entered into a Unified Command (UC) structure, consisting of Duke Energy, NCDENR and the US Fish and Wildlife Service (FWS), to manage the incident. As a part of the unified command, EPA is providing technical assistance, including oversight, data management and sampling support.

On February 5, 2014 EPA began water sampling on the Dan River. Sampling is ongoing at numerous locations including water treatment plants. Today, EPA began sampling river sediment to determine the extent, deposition layer amount and other data. EPA is working to determine when the testing data will be available and will get to you as soon as the information becomes available.

- To Valerie Bauerlein of WSJ

How many coal storage sites are there in the U.S.?

RESPONSE: EPA proposed standards governing the disposal of CCRs in 2010, and at that time the Agency estimated that there were approximately 300 CCR landfills and 584 CCR surface impoundments (or similar units) where CCRs are disposed, at approximately 495 coal-fired power plants. Since proposal, EPA has been gathering additional information, including through public comment as well as other data sources, to inform its final disposal rule. In addition, the total number of units continues to change, for example, as individual facilities change their management practices."

Any update on the proposed coal ash rule changes?

RESPONSE: In 2010, EPA proposed the first-ever national rules to ensure the safe disposal and management of coal ash from coal-fired power plants under the nation's primary law for regulating solid waste, the Resource Conservation and Recovery Act (RCRA). These rules would ensure stronger oversight of the structural integrity of impoundments in order to prevent future accidents. EPA is committed to finalizing the proposed coal ash rule by December 19, 2014.

Where does this spill rank in coal ash spills? i.e., Kingston is the largest, but have there been others larger than this?

RESPONSE: EPA has not independently confirmed the amount that has been released. Duke Energy has reported the estimated volume of ash released is between 50,000 and 82,000 tons of ash.

In EPA's 2010 coal combustion residuals regulatory proposal, EPA cited 4 cases of structural failures

TVA /Kingston – 5.4 million cubic yards of fly ash sludge

Martins Creek Power Plant – 100 million gallons released

Georgia Power/Plant Bowen – release of 2.2 million gallons of ash/water mixture

TVA Widows Creek, Stevenson AL – 5,000 cubic yards of FGD material

The Dan River spill is clearly smaller than TVA; based on preliminary information, it appears to be smaller than the Martin's Creek spill; however, it is not possible for us to say with certainty at this point precisely where this spill ranks.

Has the EPA made any comment on this spill? Or been involved in its resolution?

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- To Bruce Henderson of Charlotte Observer

In EPA's 2010 proposal, EPA cited four cases of structural failures:

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Right now, Duke estimates 50,000 to 82,000 tons of ash and 24-27 million gallons of water released. If accurate, this would put the Duke Dan River release approximately third.

- To Katie Mann of The Reidsville Review

1. What does coal ash contain?

RESPONSE: Coal combustion residuals (CCRs), commonly known as Coal Ash, are byproducts of the combustion of coal at power plants and are composed mostly of silica. CCR can also contain contaminants like mercury, cadmium and arsenic. See the 2010 proposed rule for a complete list of the chemical constituents in CCRs (Tables 2 and 3).

2. Why is there a need for coal ash ponds?

RESPONSE: Combustion of coal to generate electricity generates residuals (or CCRs). These residuals are managed in either wet or dry systems depending on the facility. If the facility uses a "wet" process or adds water to make it easier to transport the residuals, then the facility needs the ponds to manage the "wet" CCRS.

CCRs are residuals from the combustion of coal. For the purposes of EPA's waste regulations, CCRs are fly ash, bottom ash, boiler slag, and flue gas desulfurization materials generated from processes intended to generate power.

Fly ash is a product of burning finely ground coal in a boiler to produce electricity. It is removed from the plant exhaust gases primarily by electrostatic precipitators or baghouses and secondarily by wet srubber systems. Physically, fly ash is a very fine, powdery material composed mostly of silica.

Bottom ash is comprised of agglomerated coal ash particles that are too large to be carried in the flue gas. It is formed in pulverized coal furnaces and is collected by impinging on the furnace walls or falling through open grates to an ash hopper at the bottom of the furnace. Physically bottom ash is coarse, with grain sizes spanning from fine sand to fine gravel.

Boiler slag is the molten bottom ash collected that the base of certain types of furnaces and quenched with water. It is generally hard, black, angular particles that have a smooth glassy appearance.

Flue Gas Desulfurization material is produced through a process used to reduce sulfur dioxide emissions from the exhaust gas systems of a coal fired boiler. The physical nature of these materials varies from a wet sludge to a dry powdery material depending on the process.

CCRs can be managed in either wet or dry disposal systems. In wet systems, materials are generally sluiced via pipe to a surface impoundment (or pond). The material can be generated wet, such as FGD, or generated dry and water added (ie sluiced) through pipes. In dry systems, CCRs are transported in dry form to landfills for disposal.

3. If coal ash is in water, and it goes through a treatment plant, how safe really is the water to drink? Or to swim in? or for aquatic life?

RESPONSE: The N.C. Department of Environment and Natural Resources (NC DENR) is taking the lead on determining the impact to drinking water with support from Duke Energy.

4. The city of Eden has been put under an Administrative Order by the EPA because of their sanitary sewer overflows. My general question is this, What does the administrative order say? And furthermore, generally speaking, why does the EPA monitor wastewater overflows?

RESPONSE:

Sent by Region 3:

- Danville Register & Bee

You asked about EPA's role and what is being done:

RESPONSE: On February 3, 2014 The N.C. Department of Environment and Natural Resources (NC DENR) contacted EPA requesting technical assistance for the coal ash release that occurred at the Duke Energy Dan River Steam Station coal ash pond in Rockingham County, NC.

Attempts to secure the release are ongoing. EPA Regions 3 and 4 deployed On-Scene Coordinators (OSCs) and entered into a Unified Command (UC) structure, consisting of Duke Energy and NC DENR, to manage the incident. As a part of the unified command, EPA will provide technical assistance, including oversight, data management and sampling support.

The N.C. Department of Environment and Natural Resources (NC DENR) is taking the lead on determining the impact to drinking water with support from Duke Energy.

The NC DENR Division of Energy Mineral and Land Resources- Land Quality Section Director, Tracy Davis (919) 707-9200, can provide answers for impoundment safety questions.

Currently, Duke Energy is estimating between 50,000 and 80,000 tons of coal fly ash released from the ash pond to the Dan River.

Duke Energy is currently developing a response plan to address the material in the Dan River.

You mentioned the 'high hazard' rating:

RESPONSE: The hazard rating refers to the potential damage that could occur if a coal ash pond fails, it does not refer to the condition of the pond or the likelihood of failure. The State of North Carolina gave the Duke Energy coal ash pond a "high hazard" rating. EPA gave the same impoundment a "significant hazard" rating using a different rating system. Neither the North Carolina or the EPA rating in this case indicate a potential risk to human life. For additional information on the current condition of the Duke Energy coal ash pond, please contact NC DENR Division of Energy Mineral and Land Resources- Land Quality Section Director, Tracy Davis (919) 707-9200

You asked about potential enforcement actions – lawsuits, sanctions:

RESPONSE: Along with other federal agencies, EPA is working closely with our state and local partners to respond to the Duke Energy incident in Eden, N.C We are evaluating the full range of federal environmental authorities that may assist in responding to the environmental and public health risks, address any environmental violations, and minimize threats to our waters.

Sent by Region 4:

- To David Zucchino of LA Times

Is EPA on the scene? Is EPA testing the water?

RESPONSE: On February 3, 2014 The N.C. Department of Environment and Natural Resources (NC DENR) contacted EPA requesting technical assistance for the coal ash release that occurred at the Duke Energy Dan River Steam Station coal ash pond in Rockingham County, NC.

There are still intermediate releases from the storm drain. Removing water and pumping around the broken line in the ash pond is in place and working effectively, allowing the damaged storm sewer line to be excavated.

EPA Regions 3 and 4 deployed On-Scene Coordinators (OSCs) and entered into a Unified Command (UC) structure, consisting of Duke Energy, NCDENR and the US Fish and Wildlife Service (FWS), to manage the incident. As a part of the unified command, EPA is providing technical assistance, including oversight, data management and sampling support.

On February 5, 2014 EPA began water sampling on the Dan River. Sampling is ongoing at numerous locations including water treatment plants. Today, EPA began sampling river sediment to determine the extent, deposition layer amount and other data.

Is Duke Energy responsible for cleanup and costs?

RESPONSE: The N.C. Department of Environment and Natural Resources, with support from Duke Energy, is the lead agency responsible for determining the impact to drinking water potentially impacted by the spill. For more questions, please contact NCDENR Division of Energy Mineral and Land Resources, Land Quality Section Director, Tracy Davis (919) 707-9200.

I've heard that there are not any regulations for coal ash spills in waterways. Is this true? What are those regulations and when are they expected?

RESPONSE: In 2010, EPA proposed the first-ever national rules to ensure the safe disposal and management of coal ash from coal-fired power plants under the nation's primary law for regulating solid waste, the Resource Conservation and Recovery Act (RCRA). These rules would ensure stronger oversight of the structural integrity of impoundments in order to prevent future accidents. EPA is committed to finalizing the proposed coal ash rule by December 19, 2014.

What toxics are usually in coal ash? What are the possible effects on human health and fish?

RESPONSE: Coal combustion residuals (CCRs), commonly known as Coal Ash, contain contaminants like arsenic, cadmium, mercury, associated with cancer and various other serious health effects.

Direct skin contact with coal ash may cause localized irritation. Washing affected areas and removing and washing clothing are simple steps to take to remove the irritation.

Breathing airborne particulates including coal ash over long periods of time can irritate the respiratory system. People with existing lung diseases such as bronchitis, emphysema, and chronic obstructive pulmonary disease (COPD) should avoid breathing coal ash dust.

When suspended solids such as sediments and ash settle out on the bottom of rivers and streams, they can smother aquatic life and make the river bottom unsuitable for

sediment organisms. Fish eggs can also be smothered, decreasing oxygenation to the point where they do not survive.

- **To WSOC-TV in Charlotte, NC:**

Local environmental groups are calling this the 3rd biggest coal ash spill in US history. Can you confirm that?

RESPONSE: EPA has not independently confirmed the amount that has been released. Duke Energy has reported the estimated volume of ash released is between 50,000 and 82,000 tons of ash.

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The Dan River spill is clearly smaller than TVA; based on preliminary information, it appears to be smaller than the Martin's Creek spill; however, it is not possible for us to say with certainty at this point precisely where this spill ranks.

Also, is EPA releasing any data on testing for heavy metals in the water after the spill? (or is NC doing the testing?)

RESPONSE: On February 5th EPA began water sampling on the Dan River. Sampling is ongoing at numerous locations including water treatment plants. Heavy metals are one of the many constituents NC DENR and EPA are sampling for in the river water. EPA is also sampling the ash and the sediment in the River. We're working to determine when the testing data will be available and will get back to you.

The NC DENR Division of Energy Mineral and Land Resources- Land Quality Section Director, Tracy Davis (919) 707-9200, can provide answers for impoundment safety questions.

Finally, it appears that Duke Energy waited 24 hours before saying anything publicly about the spill. Was EPA notified sooner? And is it a concern that 24 hours went by before the public was notified?

RESPONSE: EPA was notified by NC DENR at 4:45 pm on 2/3/2014. EPA On-Scene Coordinators (OSC's) from Region 3 and 4 responded. While in route, the responding EPA On-Scene Coordinator contacted Duke and discussed the release and the steps needed to protect drinking water supplies. The Danville Water Treatment Plant had already been notified and were actively sampling the river water. The first OSC arrived on-site at approximately 2300 hours on 2/3/2014.

We are still gathering information as part of the response. As part of the UC, EPA is committed to its mission of protecting human health and the environment.